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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/501,044 | 07/08/2004 | Klaus Tank | 37887-400200 | 3146 |
| 27717 | 7590 | 06/13/2007 | | |
| SEYFARTH SHAW LLP 131 S. DEARBORN ST., SUITE2400 CHICAGO, IL 60603-5803 | | | EXAMINER MARCHESCHI, MICHAEL A | |
| | | | ART UNIT 1755 | PAPER NUMBER |
| | | | MAIL DATE 06/13/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/501,044

Applicant(s)

TANK, KLAUS

Examiner

Michael A. Marcheschi

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1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/8/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The rejections based on Fang et al. alone (claims 1-3 and 5-13 are rejected under 35 U.S.C. 102(a) as anticipated by Fang et al. (564) and claim 4 is rejected under 35 U.S.C. 103(a) as obvious over Fang et al. (564)) are all withdrawn.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as obvious over Fang et al. (564) in view of Portwood et al. (008) for the same reason set forth in the previous office action which are incorporated herein by reference.

Claims 1-3, 5-7 and 10-12 are rejected under 35 U.S.C. 102(b) as anticipated by Portwood et al. for the same reason set forth in the previous office action which are incorporated herein by reference.

Claim 4 is rejected under 35 U.S.C. 103(a) as obvious over Portwood et al. (008) for the same reason set forth in the previous office action which are incorporated herein by reference.

Applicant's arguments filed 3/6/07 have been fully considered but they are not persuasive.

Applicant argues that Fang does not teach the claimed sintering technique. This argument is moot because the examiner is no longer relying on this reference for the sintering

conditions. Applicant also argues that in Fang, the particles (hard particles) are already in the sintered form as is apparent from polycrystalline diamond (PCD) and polycrystalline boron nitride (PCBN). Although this may be the case, the particles are formed into a green state product and a green state product is an unsintered mass, irrespective of sintered particles being present in the mass. Notwithstanding this response by the examiners, the reference states that the particles can be PCD, PCBN or the like and the limitation "the like" would suggest to the skilled artisan that regular (not polycrystalline) diamond or boron nitride can be used and these would be unsintered particles. Applicant apparently argues that the present invention produces a green state product which is then subject to the claimed conditions and Fang does not. This is not persuasive because it is clear that a green state product is produced prior to sintering-see section [0036]. Applicant argues that page 4 of the instant application defines advantages of the claimed method when compared to the method of Fang. This is not persuasive because no clear evidence (tabular data) is provided and the specification does not refer to the method of Fang, specifically.

With respect to the combination of Fang with Portwood, applicant is arguing the references individually and one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

With respect to the rejection based on Portwood alone, applicant apparently argues that the reference has two separate zones (see figures 6-10 of the reference). The examiner fails to see the relevancy of this argument because the claimed invention does not define any zone. In

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addition, the method defined by the examiner in the last office action is in reference to the composite construction of figure 13A, thus applicants argument of figures 6-10 of the reference are arguments against the teaching of the reference not applied. Finally, Portman clearly teaches in column 16, lines 15-16 that multiple regions (zone) may be present and this does not only limit the reference to two zones, as apparently argued.

Finally applicant argues the way the inserts are made according to Portman (i.e. known paper or tape routes). The examiner fails to see the relevancy of this argument because in column 13, line 68-column 14, line 29, the reference teaches a method that involves (1) providing a plurality of fibers, each fiber having a core (hard particle mass of diamond, boron nitride) and a shell (WC-Co-cermet material), (2) producing bundles of the fibers, (3) extruding (4) severing (cutting) the bundles, (5) attaching the cut bundles, in the green state, to a substrate (cemented carbide) and (6) and consolidating (attaching to the substrate) the material by high temperature high pressure process (see column 13, lines 10-13). It is clear that the reference teaches all of the claimed method steps because each fiber contains regions of ultra hard abrasives (i.e. diamond) and regions of carbide and, prior to sintering, the product is a green state product.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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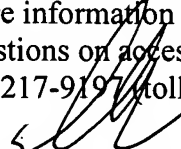
the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

4/07
MM


Michael A Marcheschi
Primary Examiner
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